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1614
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P719

Commissioner for Patents
Washington, D.C. 20231

Re: U.S. Patent Application No.: 10/076934
For: *Agents That Specifically Block CD28-Mediated Signaling and Uses Therefor*
Inventors: O'Hara, Jr., Richard M. *et al.*
Filed: February 15, 2002
Our Ref. No.: GNN-028

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

1. Information Disclosure Statement;
2. PTO Form 1449;
3. Copies of references cited in PTO Form 1449 (21); and
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on:
<u>October 24, 2002</u> Date
<u>Meg E Williams</u> Megan E. Williams, Esq., Reg. No. 43,270

Respectfully submitted,
LAHIVE & COCKFIELD, LLP

Meg E Williams
Megan E. Williams, Esq.
Registration No. 43,270
Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: O'Hara, Jr., Richard M. *et al.*

Serial No.: 10/076934

Filed: February 15, 2002

For: *Agents That Specifically Block CD28-Mediated Signaling and Uses Therefor*

Attorney Docket No.: GNN-028

Group Art Unit: 1614

Examiner: Not yet assigned

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Washington, D.C. 20231

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October 24, 2002
Date of Signature and of Mail Deposit

By:

Megan E. Williams, Esq.
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Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

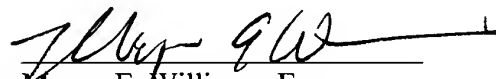
Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form 1449, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover,

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,
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Enclosures



APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO GNN-028	SERIAL NO. 10/076934
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT O'Hara, Jr., Richard M. et al.	
				FILING DATE February 15, 2002	GROUP 1614

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	5,948,893	09/99	June et al.	530	388.75	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	A2	WO 98/30232 A1	07/98	WO				
	A3	WO 98/58965 A2,A3	12/98	WO				

OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

A4	GenBank Acc. No.: NM_006139; Homo sapiens CD28 antigen (Tp44) (CD28), mRNA
A5	Alvarez-Vallina, L. <i>et al.</i> Antigen-specific targeting of CD28-mediated T cell co-stimulation using chimeric single-chain antibody variable fragment-CD28 receptors. (1996 Oct) <i>Eur. J. Immunol.</i> 26(10), 2304-9
A6	Arreaza, G.A. <i>et al.</i> Neonatal activation of CD28 signaling overcomes T cell anergy and prevents autoimmune diabetes by an IL-4-dependent mechanism. (1997 Nov 1) <i>J. Clin. Invest.</i> 100(9), 2243-53
A7	Arufo, A. <i>et al.</i> Molecular cloning of a CD28 cDNA by a high-efficiency COS cell expression system. (1987 Dec) <i>Proc. Natl. Acad. Sci. U.S.A.</i> 84 (23), 8573-8577
A8	Boussiotis, V.A. <i>et al.</i> B7 but not intercellular adhesion molecule-1 costimulation prevents the induction of human alloantigen-specific tolerance. (1993 Nov) <i>J. Exp. Med.</i> 178, 1753-1763
A9	Gilliland, L.K. <i>et al.</i> Rapid and reliable cloning of antibody variable regions and generation of recombinant single chain antibody fragments. (1996, Jan) <i>Tissue Antigens.</i> 47(1), 1-20.
A10	Gimmi, C.D. <i>et al.</i> B-cell surface antigen B7 provides a costimulatory signal that induces T cells to proliferate and secrete interleukin 2. (1991 Aug) <i>Proc. Natl. Acad. Sci. USA.</i> 88, 6575-6579
A11	Gimmi, C.D. <i>et al.</i> Human T-cell clonal anergy is induced by antigen presentation in the absence of B7 costimulation. (1993 Jul) <i>Proc. Natl. Acad. Sci USA</i> 90, 6586-6590
A12	Harper, K. <i>et al.</i> CTLA-4 and CD28 activated lymphocyte molecules are closely related in both mouse and human as to sequence, message expression, gene structure, and chromosomal location. (1991 Aug 1) <i>J. Immunol.</i> 147, 1037-1044
A13	Hayden, M.S. <i>et al.</i> Costimulation by CD28 sFv expressed on the tumor cell surface or as a soluble bispecific molecule targeted to the L6 carcinoma antigen. (1996 Oct) <i>Tissue Antigens.</i> 48(4 Pt 1), 242-54.
A14	June, C.H. <i>et al.</i> Role of the CD28 receptor in T-cell activation. (1990) <i>Immunol. Today.</i> 11, 211-6
A15	Lee, K.P. <i>et al.</i> The genomic organization of the CD28 gene. Implications for the regulation of CD28 mRNA expression and heterogeneity. (1990 Jul 1) <i>J. Immunol.</i> 145, 344-352
Examiner _____ Date Considered _____	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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